EAST ASIAN HISPINÆ AND CASSIDINÆ IN THE COLLECTION OF THE CALIFORNIA ACADEMY OF SCIENCES

(Coleoptera, Chrysomelidæ)

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This paper is in the nature of a brief report on the hispine beetles and tortoise beetles from eastern Asia in the collection of the California Academy of Sciences in San Francisco. Most of the material is from eastern China, Indo-China, the Philippine Islands and Borneo, while the remainder is from Manchuria, central and southern Japan, Formosa, western China, Hong Kong, the East Indies and Ceylon. Many of the specimens were collected in 1923 by Dr. E. C. Van Dyke, some were taken by Mrs. Dora E. Wright, and the remaining specimens were largely collected by Dr. J. C. Thompson and Albert Koebele. In all, sixtynine species are enumerated, of which three are described as new to science. Two of the latter are from Borneo and one is from China, all three belonging to the Hispinæ. I am greatly indebted to Mr. E. P. Van Duzee of the California Academy of Sciences and to Dr. E. C. Van Dyke of the University of California for the privilege of studying this material, and to Dr. S. Maulik of the British Museum for comparing certain specimens with types.

SUBFAMILY HISPINÆ

TRIBE ANISODERINI

1. Lasiochila Balli Uhmann, 1930

A singe topotype from Kanshirei, S. W. Formosa was collected on March 25, 1909, by Dr. J. C. Thompson.

2. Lasiochila feæ (Baly), 1888, new combination

One specimen was taken at Riv de Quangtri, Annam, Indo-China, on April 25, 1925, by Mrs. Dora E. Wright. New to Indo-China.

TRIBE CALLISPINI

3. Callispa apicalis Pic, 1924

A specimen was collected at Hangchow, Chekiang Province, E. China, May 19, 1923, by Dr. E. C. Van Dyke.

4. Callispa Bowringii Baly, 1858

A topotype is in the collection, taken on Hong Kong Island, March 1, 1925.

5. CALLISPI CUMINGII Baly, 1858

One example was taken on Mt. Pina Tuba, Philippine Island, 5,600 ft. alt., April, 1907, by J. C. Thompson.

6. Callispa flavescens Weise, 1911

One specimen was collected at Alabang, Luzon, Philippine Is., June 11, 1930.

7. CALLISPA FORTUNII Baly, 1858

Several were taken at Hangchow, Chekiang, E. China, May 23, 1923, by Dr. Van Dyke.

TRIBE LEPTISPINI

8. Leptispa godwini Baly, 1869

A few examples were taken at Hangchow, Chekiang, May 19, 1923, by Dr. Van Dyke.

TRIBE ONCOCEPHALINI

9. Oncocephala bicristata Chapuis, 1876

Seven specimens were collected at Subig Bay, Luzon, May 1907, J. C. Thompson; one was taken at Dolores, Luzon, May 17, 1930.

10. Oncocephala quadrilobata Guerin, 1844?

One specimen was taken at Hue, Annam, Indo-China, May 15, 1927, by Mrs. Dora E. Wright.

TRIBE PROMECOTHECINI

11. Promecotheca cumingi Baly, 1858

A specimen was taken at Manila, Philippine Is., March 1926.

Tribe Gonophorini

12. Downesia vandykei Gressitt, new species

Small, very narrow, broadest posteriorly; shiny; reddish brown, posterior four-fifths of elytra pitchy, neck pitchy red above and below, pitchy black at sides, occiput dull reddish brown, pitchy

at sides, antennæ pitchy brown to pitchy black, first two segments reddish brown, eyes blackish with golden-brown markings, first two abdominal segments yellowish brown, remainder reddish brown.

Head rounded anteriorly, nearly as wide as basal margin of prothorax; from swollen, transverse, punctured, its posterior margin convex; vertex depressed, non-tuberculate; occiput nearly plane, feebly concave behind, finely and sparsly punctured; eyes large, about one-third deeper than wide, strongly convex interiorly; neck shiny, nearly impunctate. Antennæ one-third as long as body, thickened apically, clothed with minute golden-brown hairs, scape nearly glabrous, swollen, barely longer than second segment, which is cylindrical; third nearly as long as second, a little longer than fourth; fourth to sixth subequal; seventh to tenth a little longer, subequal; last longest. Prothorax slightly longer than broad, widened toward apex; sides nearly straight; apical margin convex, basal margin feebly so; surface convex, minutely and irregularly punctulate; base transversely grooved; lateral margins slightly expanded. Scutellum small, slightly concave. Elytra widened toward apex, broadly rounded behind, longitudinally punctured in seven rows anteriorly and in eight rows posteriorly, first row branching a little before middle, three raised lines between pairs of punctures, first broad and depressed on basal half, all distinctly raised apically. Metasternum punctured only along lateral margins; abdomen finely punctulate on apical segments. Length 4.4 mm.; breadth 1.2 mm.

Holotype, No. 4696, Calif. Acad. Sci., Ent., Hangchow, Chekiang Province, East China, May 19, 1923, collected by Dr. E. C. Van Dyke. Named in honor of the collector as a slight token of gratitude for kindness and aid extended by him to the writer.

This species differs from *D. marginicollis* Weise in being about one-half as large, mostly red instead of black, with the elytra red on basal fifth, etc. Differs from *D. tarsata* Baly in having the elytra largely black instead of yellowish, the tarsi brownish instead of black, etc.

13. Agonia purpurascens Gressitt, new species

Moderately elongate, nearly parallel. Body metallic reddish purple to purplish brown: head brownish purple; antennæ black with silvery pubescence on apical two-fifths; pronotum bronzy or brownish purple; scutellum blackish; elytra shiny reddish purple; ventral surfaces reddish brown with bronzy or purplish tinges; legs pitchy, greenish and bronzy in part. Dorsal surfaces of body glabrous; borders of abdomen narrowly with short pale oblique hairs.

Head barely as broad as anterior margin of prothorax, smooth, impunctate except on labrum. Antennæ a little more than one-half as long as body, moderately slender; scape about as long as, though thicker than, second segment; third about as long as eleventh, a little shorter than combined length of first two segments; sixth longer than fifth and shorter than fourth; last thickest, subacute apically. Prothorax distinctly broader than long, almost evenly narrowed from base to constricture just before apex; disc impunctate in center, hardly grooved medially, obliquely grooved and punctured at each side of base, concave and densely punctured on each side. Elytra long, subparallel-sided; each with three longitudinal costæ and eight to eleven rows of heavy punctures: third costa subobsolete along central portion, second interspace with three, and in part four, rows of punctures basally, and outermost with one extra row near base each with two rows from before middle to near apex. Ventral surfaces almost impunctate except near apex of abdomen. Length 7.4 mm.; breadth 2.6 mm.

Holotype, No. 4697, Calif. Acad. Sci., Ent., Mt. Murud, Borneo, Mjöberg collection, W. W. Funge bequest.

Differs from A. jacobsoni Uhmann in being smaller, in having the prothorax and elytra both nearly unicolorous and lacking black markings, the ventral surfaces purplish brown instead of black, the third antennal segment shorter than fourth and fifth combined, fourth to tenth segments not equal in length and thickness, each elytron with four rows of punctures for a short distance near base of second interstice, etc.

14. Agonia xanthosticta (Gestro), 1897

A specimen is in the collection from Kuching, Borneo, Mjöberg collection.

15. Agonia (Agoniella) vandepolli (Gestro), 1897

Six examples were taken at Subig Bay, Luzon, P. I., May 1907, by J. C. Thompson.

16. Gonophora albitarsis Gestro, 1910?

Two specimens from the Mjöberg collection labelled "Baram Rov" are in the Academy. These are probably from Borneo.

17. Gonophora apicalis Baly, 1858

One specimen was taken at Dolores, Luzon, P. I., May 17, 1930.

18. Gonophora borneana Gressitt, new species

Moderately broad, slightly widened posteriorly. Largely metallic greenish, blue or purplish; head green above, purplish brown on frons and labrum; antennæ greenish black basally, pitchy brown beyond middle and whitish testaceous on last two segments; prothorax green, somewhat bronzy along central portion; scutellum blackish; elytra frosted green along suture and on parts of base, bluish along external margins, bluish black on central portions of discs, and purplish on raised costæ; ventral surfaces purplish black; legs pitchy with greenish or bronzy reflections.

Head convex and slightly uneven above, hardly punctate. Antennæ three-fifths as long as body, slightly thickened beyond middle; scape a little longer and thicker than second segment; third almost as long as preceding two combined and subequal to each of following two; sixth to tenth shorter, subequal. Prothorax not quite twice as broad as long, a narow transverse groove near apex and base; sides sinuate and feebly dentate, widest just before middle, suddenly constricted before apex; disc impunctuate on anterior median portion, narrowly grooved from just before center to near base, deeply impressed in an oblique direction on each side and bearing irregular coarse punctures. Elytra slightly sinuate laterally, each with three costæ, the inner two strongly raised and the third nearly obsolete; punctures in seven rows at middle, last two interspaces merged and with three punctures, second interspace with three rows at base; apices without distinct teeth. Abdominal sternites in part finely puctured. Length 6.5 mm.; breadth 2.65 mm.

Holotype, No. 4794, Calif. Acad. Sci., Ent., Mt. Murud, Borneo, Mjöberg collection; W. W. Funge bequest.

Differs from G. chalybeata Baly in being largely green or blue-green above and purplish black beneath, in having the prothorax much broader than long, the elytra with the third costa almost lacking, with three puncture-rows in the last two interstices together, and with the apices practically untoothed.

19. Gonophora Hæmorrhoidalis (Weber), 1801

One specimen is in the Academy from Mt. Poi, Sarawak, Borneo.

20. Gonophora xanthomelæna (Wied.), 1823

One specimen was collected at Siborangit, Borneo.

TRIBE HISPINI

21. Monochirus Mærens (Baly), 1874

A large series of specimens was taken at Nanking, Kiangsu Prov., E. China, May 4, June 10, 20 and September 14, 1923, one at Nantung, E. China, May 9, 1932, and several at Unzen Hot Springs, Kyushu, S. Japan, July 8-12, 1923, all by Dr. Van Dyke.

22. Monochirus sp.

A few specimens were taken on Mt. Pina Tuba, Philippine Is., April 1907, by J. C. Thompson. These may represent the form recorded from Luzon as M. callicanthus (Bates), but they appear to differ at least subspecifically from typical Formosan material.

23. Rhadinosa nigrocyanea (Motsch.) 1861

Several specimens were collected at Nikko, Honshu, Japan, July 30, 1923, by Dr. Van Dyke, and one at Ikao, Honshu, in August 1909, by Dr. Thompson.

24. Dactylispa angulosa (Solsky), 1872

A large series was taken at Nanking, Kiangsu Province, E. China, April 25, 30, May 4; and several at Hangchow, Chekiang, E. China, May 18, 1923, by Dr. Van Dyke; a few examples were taken at Mokan Shan, Chekiang, in August 1927, by Mrs. Dora E. Wright. Some additional specimens are in the Academy from Nagoya, Honshu, Japan, May 15, 1909.

25. Dactylispa cladophora (Guerin), 1841

One example was taken at Alabang, Luzon, P. I., May 29, 1929.

26. Dactylispa corpulentina Uhmann, 1927

A few specimens were taken on the Island of Formosa by Dr. J. C. Thompson.

27. Dactylispa dimidiata (Gestro), 1885

Two specimens from Kota Tjane (Borneo?) are in the Mjöberg collection.

28. DACTYLISPA SAUTERI Uhmann, 1927

Several examples were taken by Dr. J. C. Thompson in Formosa.

29. DACTYLISPA SUBQUADRATA (Baly), 1874

Several were taken at Nanking, Kiangsu, E. China, April 30, 1932, E. C. Van Dyke, and Nagoya, Japan, May 15, 1909.

30. Dactylispa vittuta (Chapuis), 1876

Ten specimens were collected at Subig Bay, Luzon, May 1907, and two at Mt. Pina Tuba, 5,600 ft. alt., Luzon, April 1907, by J. C. Thompson.

31. PLATYPRIA ECHIDNA Guerin, 1840

A single specimen is in the collection, labelled "Loo Choo, China, May 1910, collected by J. C. Thompson." This is probably from Okinawa Island in the central Ryu Kyu Archipelago. The species is new to the Ryu Kyu Islands, and the genus is new to the Japanese Archipelago.

SUBFAMILY CASSIDINÆ TRIBE PRIOPTERINI

32. HOPLIONOTA SP.

Two specimens are in the collection from Luzon: one from Subig Bay, May 1, 1907, J. C. Thompson, the other from Alabang, June 11, 1930.

33. Calopepla leayana insulana Gressitt, 1938

A paratype is in the Van Dyke collection, taken at No-kyuchun, Hainan Island, March 22, 1936.

34. PRIOPTERA ANGUSTA Spaeth, 1914

One specimen, taken at Kuraru, Koshun, S. Formosa on June 10, 1932, is in the Van Dyke collection.

35. Prioptera chinensis (Fabr.), 1798

Several were collected at Hangchow, Chekiang, E. China, May 23, 1923, by Dr. Van Dyke.

36. PRIOPTERA IMMACULATA Wegener, 1881

One specimen was taken at Alabang, Luzon, P. I., June 11, 1930.

37. PRIOPTERA MACULIPENNIS REDUCTA Gressitt, 1938

One specimen collected by the writer at Ta-hian, C. Hainan Id., June 12, 1935, is in the Van Dyke collection.

38. PRIOPTERA SINUATA (Olivier), 1790?

A specimen was taken at Alabang, Luzon, P. I., June 11, 1930.

39. Prioptera whitei trabeata Fairmaire, 1888

Mokan Shan, Chekiang; Cha-yuan, Chekiang.

40. MEGAPYGA COERULEOMACULATA Boheman, 1850

One example was collected at Alabang, Luzon, P. I., June 11, 1930.

41. MEGAPYGA TERMINALIS Boheman, 1862

One specimen from Alabang, Luzon, June 11, 1930, is in the collection.

TRIBE ASPIDOMORPHINI

42. ASPIDOMORPHA DIFFORMIS (Motsch.) 1860

Specimens were taken at Hangchow, Chekiang, E. China, May 19, and Weisohn, August 31, and Chin San, September 10, Manchuria, 1923, by Dr. E. C. Van Dyke; additional specimens were collected at Mokan Shan, Chekiang, September 9, 1927, by Mrs. Dora E. Wright.

43. ASPIDOMORPHA DORSATA (Fabr.), 1787

One specimen is in the Van Dyke collection, taken at Ta-hian, Hainan Id., June 17, 1935, by J. L. Gressitt.

44. Aspidomorpha furcata (Thunb.) 1789

A few were taken at Riv de Quangtri, Annam, Indo-China, April 14-15, 1927, Mrs. Dora E. Wright; one was collected on Hong Kong Id. in October 1895; one at Kandy, Ceylon, by Albert Koebele; and another at Chung-kon, Hainan Id., July 19, 1935, J. L. Gressitt.

45. ASPIDOMORPHA FUSCOPUNCTATA Boheman, 1854

Riv de Tchepone, Annam; Subig Bay, Luzon; Liamui, Hainan Island.

46. ASPIDOMORPHA INDICA Boheman, 1854

One specimen was taken at Riv de Quangtri, April 14, and another at Hue, May, 15, Annan, Indo-China, 1927, by Mrs. Dora E. Wright.

47. ASPIDOMORPHA MILIARIS (Fabr.), 1775

One example was taken at Riv de Hue, Annam, Indo-China, May 16, 1927, Dora E. Wright; another at Ta-hian, Hainan Id., June 19, 1935, Gressitt; six at Buitenzorg, Java, April 8, 1908, E. Cordier; four at Djirak, near Palembang, Sumatra, April 1929, G. W. Heid; three at Subig Bay, Luzon, May 1900, J. C. Thompson; and three at Manila.

48. ASPIDOMORPHA SANCTÆ-CRUCIS (Fabr.), 1792

One specimen is in the Academy labelled merely "India, Koebele collection"; two were taken on Hainan Id. by the writer: one at Tai-pin (Dwa-bi), July 22, and one at Liamui, August 1, 1935; three specimens, perhaps from Borneo, are from the Mjöberg collection.

49. Aspidomorpha sanctæ-crucis fraterna Baly, 1863

Two specimens were collected at Hue, Annam, Indo-China, May 15, 1927, by Mrs. Dora E. Wright.

50. LACCOPTERA QUADRIMACULATA BOHEMANI Weise, 1910

Specimens were taken at the following localities: Hangchow, Chekiang, May 23, 1923, E. C. Van Dyke; Mokan Shan, Chekiang, September 9-23, 1927, Dora E. Wright; Foochow, Fukien, 1926, C. R. Kellogg; Hong Kong, J. Koebele; Taipeh (Taihoku), Formosa, May 9, 1909, J. C. Thompson; Riv de Hue, Annam, Indo-China, March 16, 1927, Dora E. Wright.

51. Laccoptera quatuordecimnotata Boheman, 1855

Two specimens were collected on Ceylon by Albert Koebele.

52. LACCOPTERA TRIDECIMPUNCTATA (Fabr.), 1801

Three specimens were taken at Subig Bay, Luzon, P. I., by Dr. J. C. Thompson, May 1907.

53. LACCOPTERA VIGINTISEXNOTATA PUNCTICOLLIS Gressitt, 1938

Six specimens were taken at Riv de Quangtri, Annam, May 3-5, 1927, by Mrs. Dora E. Wright.

TRIBE COPTOCYCLINI

54. THLASPIDA JAPONICA Spaeth, 1914

Specimens were taken at Hangchow, Chekiang, May 19, 1923, E. C. Van Dyke; Mokan Shan, Chekiang, August 20-September 23, 1927, Dora E. Wright; Kwanhsien, Szechuan, W. China, July 11, 1928; Nikko and Miyanoshita, Honshu, Japan, August 1895, Albert Koebele; Unzen Hot Springs, Kyushu, July 8-12, E. C. Van Dyke; Taipeh (Taihoku), Formosa, May 2-9, 1909 and Keelung (Kiirun), Formosa, April 21, 1909, J. C. Thompson.

55. METRIONA CIRCUMDATA (Herbst), 1799

Four were collected on Yakushima, south of Kyushu, Japan, April 1912, and several on Ishigaki Id., S. Ryu Kyu Is., May 1910, J. C. Thompson; one is labelled "Keelung, China, 1910, coll. by Victor Kuhne" (probably Kiirun, Formosa); several were taken at Swatow, S. China, and one on Hong Kong, by Albert Koebele; one at Riv de Tchepone, April 9, and one at Riv de Quangtri, April 14, Annam; three from Manila were presented by R. Hopping; and one was collected at Manila on February 19, 1929, by E. G. Linsley.

56. Metriona sigillata (Gorham), 1885

One was taken at Miyanoshita, Honshu, Japan, June 1, 1895, A. Koebele; another is labelled "Japan; Koebele"; and one was taken at Mokan Shan, Chekiang, E. China, September 24, 1927, Dora E. Wright.

57. METRIONA THAIS (Boheman), 1862

Several were collected at Hangchow, Chekiang, May 19-June 2, 1923, E. C. Van Dyke; and one at Mokan Shan, August 28, 1927, Dora E. Wright.

TRIBE CASSIDINI

58. CASSIDA (DELOYALA) VESPERTINA Boheman, 1862

Five were taken at Mokan Shan, Chekiang, August 25, September 24-28, 1927, Dora E. Wright; one at Hangchow, Chekiang, May 25, 1932, E. C. Van Dyke; and another at Kwanhsien, Szechuan, W. China, July 10, 1928.

59. Cassida (Cassida) fuscorufa Motsch., 1866

Several were taken at Nanking, April 30, May 4, June 2 and 25, and a few at Hangchow, May 19, 1923, by Dr. E. C. Van Dyke; one is labelled "Japan; Koebele".

60. CASSIDA (CASSIDA) JAPANA Baly, 1874

One example was collected at Nagasaki, Japan, July 6, 1923, by Dr. Van Dyke.

61. Cassida (Cassida) lineola Creutzer, 1799

Several were taken at Moji, Kyushu, July 7, and Kyoto, July 16, Japan, 1923, E. C. Van Dyke; one at Harada, Kobe, Japan, June 13, 1911, J. E. A. Lewis; one at Tunglu, China, March 30, 1926, and two at Mokan Shan, Chekiang, September 16 and 28, 1927, Dora E. Wright.

62. Cassida (Cassida) mongolica Boheman, 1854

One was collected at Tung-ko Forest Station, Kiangsu, China, June 11, 1923, E. C. Van Dyke.

63. Cassida (Cassida) nebulosa Linn., 1758

One specimen was taken at Otaru, Hokkaido, Japan, August 1910, J. C. Thompson, and another at Mukden, Manchuria, August 14, 1923, E. C. Van Dyke.

64. CASSIDA (CASSIDA) OBTUSATA Boheman, 1854

Three examples were collected on Hong Kong Id., October 1895, Albert Koebele; two were taken at Riv de Tchepone, Annam, April 9, 1927, Dora E. Wright; one is labelled "China, Koebele"; one was collected at Manila in February 1926; and one was taken at Alabang, Luzon, June 11, 1930.

65. Cassida (Cassida) piperata Hope, 1842

A few were taken at Nanking, Kiangsu, May 4 and June 19, 1923, E. C. Van Dyke; one was taken at Kobe, Japan, in February 1909, J. C. Thompson.

66. Cassida (Cassida) triangulum (Weise), 1897

One example was taken at Riv de Quangtri, Annam, Indo-China, April 14, 1927, Dora E. Wright.

67. CHIRIDA PUNCTATA (Weber), 1801

Several specimens were collected at Riv de Tchepone, April 9, two at Riv de Quangtri, April 14, and one at Riv de Hue, March 16, 1927, Dora E. Wright. One was collected at Kota Tjane, Borneo(?), Mjöberg collection, W. W. Funge bequest.

68. CHIRIDA SCALARIS (Weber), 1801

A single specimen was collected at Riv de Hue, Annam, Indo-China, March 16, 1927, by Mrs. Dora E. Wright; two were taken at Djirak, near Palembang, Sumatra, April 1929, by G. W. Heid.

69. HEBDOMECOSTA REITTERI Spaeth, 1915

One specimen was collected at Hangchow, Chekiang Prov., E. China, May 19, 1923, by Dr. E. C. Van Dyke.

APHIDS ON SPIRÆA

(Homoptera, Aphididæ)

The fact that aphids may indirectly be the cause of much annoyance in the house was recently observed in the case of the green citrue aphid, Aphis spiræcola Patch on its native host, the bridal wreath shrub, Spiræa, which is commonly planted around houses in Los Angeles. Many species of flying insects are attracted to the honey dew, including the house fly, the stable fly, the green bottle fly, fruit fly and numerous others. It has been observed several times that if the bridal wreath shrub was not cared for, the inhabitants of the house suffered no little discomfort from these household pests.—N. Stahler.